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A Report by

THE CANADA COUNCIL

of University Teaching Staff
in the Social Sciences and the Humanities
1956/57 to 1967/68



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A Report by

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of University Teaching Staff
in the Social Sciences and the Humanities
1956/57 to 1967/68

Prepared by

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The Dominion Bureau of Statistics is the main source of information on the number and characteristics of university teachers in Canada. The Bureau conducts periodic surveys of staff resources, making the results available in both regular and occasional publications. Unfortunately, the data are not given in a form which is detailed enough for the needs of the Canada Council. When plans for analysing the impact of the Council's programme of research grants were formulated in the fall of 1968, it became clear that a more detailed profile of the university community would be needed than was available from published reports. As a result, an effort was made to obtain DBS data in their original form in order to conduct separate tabulations. The present report contains the results of such an independent analysis of DBS material. It is based on data from five surveys of university staff resources, taken over a period of eleven years with the most recent figures being for 1967/68.

Work for the report has been guided by two main concerns. As pointed out, more detailed information on the number and characteristics of university teachers was needed for programme evaluation. It has been a major aim, therefore, to establish an up-to-date profile of the community of university teachers in the social sciences and the humanities. At the same time,

I would like to thank DBS for making these data available. I am particularly grateful to Mr. P. Boulet, Chief, Higher Education Section, for his cooperation and help. I would also like to make acknowledgement to the Economic Council of Canada for underwriting some of the computing costs of the study.

The set of data on which this paper is based also forms the basis for the following DBS publications: Salaries and Qualifications of Teachers in Universities and Colleges (latest edition in 1965/66) and Degrees Held by Canadian University Teachers, Part I: Distribution By Rank, Faculty, and, Field, 1963-64. See also NRC Office of Economic Studies, Publication No. 9174, August 1966.



there existed a less specific but equally important need for an understanding of patterns of growth. Present circumstances are the result of past development and it is generally necessary to review the past in order to grasp the significance of the present profile. This certainly applies to work on the Canadian academic community, which has undergone profound changes in the past decade. The present report sets out to trace these changes by comparing successive profiles. It shows the growth in numbers and the change in some selected characteristics and reveals the pattern of development by discipline and region.

1. Nature of the Data

Anybody engaging in a descriptive analysis of this scope must work with data collected by others. While reliance on others is essential, it also limits the choices of the investigator. He must accommodate himself to the data design established by the agency whose numbers he is using. He can neither determine the sample nor the points on which information is obtained. In addition, he is bound by the classifications used in coding the data when survey results are transferred from questionnaires to computer cards.

The reader of the present report should keep these limitations in mind. The characteristics of university teachers discussed here are those on which DBS collects information. Other characteristics of equal relevance could not be dealt with because data are lacking. The material used includes data on academic rank, age and highest degree. As pointed out already, characteristics are compared by discipline and region. Here again, we are bound by DBS conventions. It is necessary to use the Bureau's definitions of disciplines and academic fields. Terms such as "pure social science" and "applied social science" are definitely not favorites with this writer.

They have been retained partly because coding made this a necessity and partly because the results of the present study should be more or less comparable to figures in DBS publications where such terminology is customarily employed.

The surveys of staff resources conducted by DBS include all major institutions of higher education. They do not include all the smaller institutions, however. Unfortunately, the Bureau has not developed any meaningful criteria which would justify inclusion of certain institutions and rejection of others. Such criteria could be based, for example, on the nature of degrees which are granted or on the type of affiliation which some colleges have with major universities. As they now stand, the surveys include some four-year colleges, some classical colleges and even a few junior colleges, but they do not include all such institutions of a given This raises problems of interpretation, both when we draw inferences about the total population of university teachers in Canada and when we compare different regions. It will be useful to indicate briefly the approach which has been adopted in this report. The data were tabulated (1) for all institutions on which information was collected and (2) for a sub-set of institutions consisting of all those universities and colleges which were members of AUCC in 1968. Comparison of results revealed that differences between the two sets were relatively minor. In 1967/68, for example, the number of teachers in all institutions exceeded

 $^{^2}$ It should perhaps be pointed out that institutions which were members in 1967/68 were included automatically for all the years in which DBS collected data on them. Since on occasion acceptance into the AUCC and appearance in the DBS survey data do not coincide in time, there may be some minor deviations from the true historical record for AUCC member institutions.

the total of the AUCC set by only 364, out of a staff of 16,000. Nevertheless, it was decided to base the analysis in the report on tabulations for AUCC member institutions since this set represents a population more directly applicable to Canada Council programmes and one being defined in accordance with consistent institutional criteria. It would not have been advisable, on the other hand, to neglect regular DBS figures altogether. Unless special tabulations are to be repeated every year, future work will have to rely on the Bureau's published survey results, a fact making comparability an important consideration. To allow future reference, tables giving the number of university teachers for all institutions represented in the surveys have been included in the appendices. In addition, all such institutions have been listed by name while for each one the years in which it was represented have been indicated.

2. The Pattern for Canada

The starting point of the discussion is a table giving the number of full-time university teachers in AUCC member institutions from 1956/57 to 1967/68. Except for the interval between 1960/61 and 1963/64, which spans three years, figures are presented for every second academic year. Table 1 includes teachers in all fields and disciplines. However, only the figures for the humanities and the social sciences are given in detail. The number of teachers in the sciences, which has been included to serve as a basis for comparison, is shown in four aggregate groupings.

Information on teachers in those areas for which the Canada Council has responsibility has been broken down by discipline. In interpreting Table 1 and the tables that follow, the reader should keep in mind that DBS classifies university teachers by departmental affiliation. Since Canadian universities



are organized predominantly along departmental lines, with joint appointments being a rare occurrence, we can accept the tables as giving an accurate picture of the institutional development in various disciplines. To a large extent we can also interpret the figures as showing the number of potential researchers in the various fields. However, it must be remembered that interdisciplinary research efforts are a great deal more common than joint appointments.

While most of the discipline headings used by DBS are reasonably clear, some require explanation. Notes at the back of Table 1 provide information on the more obscure terms. Some study of the scheme will make apparent why the generalized headings - those containing the words "pure" or "applied" have been retained in the present report, although they cannot be accepted as accurate descriptions. If any meaningful comparisons between the natural sciences on the one hand and the humanities and social sciences on the other are to be made, they have to contrast fields where academic qualifications and professional careers are similar and comparable. Such similarity does exist among the "pure" groups; it is not found, however, within or among applied fields. (Applied Biological Science, for example, includes such diverse subjects as Agriculture, Nursing and Medicine.) Use of the DBS groupings allows us to make broad comparisons among the "pure" fields. detailed comparisons using individual disciplines in the natural sciences would have expanded the work of tabulation beyond manageable proportions.

A look at Table 1 confirms the major theme of this report: Canadian universities have gone through a period of very rapid expansion. Over the eleven-year period considered here, the number of university teachers rose from 4,342 to 16,000, close to fourfold. The rapid expansion led to a change in structure. The relative importance of the natural sciences decreased



Table 1

Number of University Teachers in Canada 1956/57 - 1967/68

By Field and Discipline

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	827 31 108 8 15 85 496 238 103 155 125 22 45	951 38 105 4 17 84 584 298 145 141 153 29 42	1141 37 127 6 26 95 731 369 184 178 175 28 43	1818 84 169 3 32 134 1183 568 299 316 274 45 63	2561 144 195 4 26 165 1685 800 432 453 357 79 101	3525 257 250 6 14 230 2314 1093 561 660 468 92 144
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	163 7 17 71 68	145 5 10 76 54	170 4 8 92 66	197 4 20 94 78 1	255 6 35 89 124 1	416 8 51 128 209 20
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	462 9 182 57 20 105 36 115 77 31 12	566 12 208 82 33 93 52 128 105 39 22	711 16 252 100 50 102 74 169 122 57 21	28 408 204 116 88 132 284 212 108 41	1853 48 574 284 184 106 193 410 365 180 83	2844 96 865 479 308 78 302 594 603 274 110
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	541 100 171 55 58 94 53 10	683 135 226 83 76 96 55	827 152 292 95 98 111 62 17	1153 222 414 104 133 170 96 14	1502 308 558 115 174 224 105 18	2115 469 791 131 262 317 123 22



Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	<u>347</u>	370	412	597	<u>759</u>	996
APPLIED BIOLOGICAL SCIENCES	721	715	808	1036	1268	2002
PURE PHYSICAL SCIENCES	<u>779</u>	928	1135	1568	2036	<u>2623</u>
APPLIED PHYSICAL SCIENCES	502	<u>583</u>	741	943	1097	1479
TOTAL, ALL FIELDS	4342	4941	5945	8525	11331	16000

Notes

The Table contains data on all institutions which were AUCC members in 1967/68 with the exception of Huron College and King's College, two small institutions affiliated with the University of Western Ontario. A table in the appendix lists the institutions in alphabetical order, together with the years in which they were included. The underlined figures represent totals or subtotals.

The term 'Other Modern Language and Literature' also includes Linguistics.

The term "Other Pure Humanities" includes East Asiatic Studies, Islamic Studies, Slavic Studies, Celtic Studies and Near Eastern Studies.

The term "Business Administration" also includes Accounting and Industrial Relations.

The term "Pure Biological Sciences" groups together Botany, Zoology (including Anatomy, Histology, Embroyology, Entomology, Palaeontology, Physiology) and Pure Biological Science, n.e.c. (including Genetics, Natural History, Microbiology, Radiation Biology).

The term "Applied Biological Science" groups together Agriculture (including Animal Science, Soil Science), Dentistry, Forestry, Hygiene and Public Health, Medicine (including Medical Technology), Nursing, Optometry, Pharmacy, Physio-and Occupational Therapy (including Rehabilitation), Veterinary Medicine and Veterinary Science, Applied Biological Science, n.e.c. (including Fisheries, Marine Science, Oceanography).

The term "Pure Physical Science" groups together Chemistry (including Biochemistry), Geology (including Mineralogy), Mathematics (including Astronomy, Geodesy, Statistics), Physics (including Biophysics, Geophysics, Mathematical Physics) and Pure Physical Science, n.e.c.

The term "Applied Physical Science" groups together Architecture (including town planning) and Engineering, Chemical Engineering, Civil Engineering (including Agricultural Engineering, Architectural Engineering, Forestry Engineering, Structural Engineering), Electrical Engineering, Mechanical Engineering, Mining Engineering (including Geological Engineering, Metallurgical Engineering, Petroleum Engineering), Engineering, n.e.c. and Applied Physical Science, n.e.c. (including Aerophysics, Applied Mathematics, Applied Physics).



from an overall share of 54.1 in 1956/57 to 44.4 per cent in 1967/68.

The pure social sciences, on the other hand, made dramatic gains, increasing their share from 10.6 to 17.8 per cent. A more moderate gain is apparent for the pure humanities where the proportion grew from 19.0 to 22.0 per cent.

Table 2 shows the pattern of growth in more detail. Percentage increases for the whole period are presented in the last column together with absolute changes in the number of teachers. Again, the natural sciences remain far behind those disciplines for which the Canada Council has responsibility. While the pure humanities increased by 326 per cent and the pure social sciences by 516 per cent, the pure biological and physical sciences rose by 178 and 195 per cent respectively. It is interesting to note that growth did not occur at an even rate. If we take into account that the third interval spanned three years while the other four lasted only two, we notice a steady increase in the average annual rate of growth throughout the period.

It is illuminating to compare increases in various disciplines. Not all disciplines did expand; in Latin and Greek there was a slight reduction in the total number of teachers. All other humanities classified as "pure" showed a pattern of expansion, however, with Fine Arts registering the highest percentage gain. The largest growth in absolute terms occurred in English where 855 university teachers were added. As pointed out, the increase in the pure social sciences was even more marked than that in the humanities. Disciplines such as Anthropology and Geography, which started from a small base, showed explosive growth in percentage terms. Psychology was not far behind while History and Economics & Political Science showed increases of 417 and 375 per cent. Separate figures for the last two disciplines show



Table 2

Increase in the Number of University Teachers in Canada 1956/57 - 1967/68

By Field and Discipline

Field and Discipline	1956/57 to 1958/59	1958/59 to 1960/61	1960/61 to 1963/64	1963/64 to 1965/66	1965/66 to 1967/68	1956/57 to 1967/68
	No. %	No. %	No. %	No. %	No. %	No. %
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	124 15 7 23 -3 -3 -4 -50 2 13 -1 -1 88 18 60 25 42 41 -14 -9 28 22 7 32 -3 -7	190 20 -1 -3 22 21 2 50 9 53 11 13 147 25 71 24 39 27 37 26 22 14 -1 -3 1 2	677 59 47 127 42 33 -3 -50 6 23 39 41 452 62 199 54 115 63 138 77 99 57 17 61 20 47	743 41 60 71 26 15 1 33 -6 -19 31 23 502 42 232 41 133 44 137 43 83 30 34 76 38 60	964 38 113 78 55 28 2 50 -12 -46 65 39 629 37 293 37 129 30 207 45 111 31 13 16 43 43	2698 326 226 729 142 131 -2 -25 -1 -7 145 170 1818 367 855 359 458 445 505 325 343 274 70 318 99 220
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	-18 -11 -2 -29 -7 -41 5 7 -14 -20	25 <u>17</u> -1 -20 -2 -20 16 21 12 22	27 16 12 150 2 2 12 18	58 29 2 50 15 75 -5 -5 46 58	161 63 2 33 16 46 39 44 85 68 19 1900	253 155 1 14 34 200 57 80 141 207 20
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	104 23 3 33 26 14 25 44 13 65 -12 -11 16 44 13 11 28 36 8 26 10 83	145 26 4 33 44 21 18 22 17 52 9 10 22 42 41 32 17 16 18 46 -1 -5	502 71 12 75 156 61 104 104 66 132 -14 -14 58 78 115 68 90 74 51 89 20 95	640 53 20 71 166 40 80 39 68 59 18 20 61 46 126 44 153 72 72 67 42 102	991 53 48 100 291 50 195 69 124 67 -28 -26 109 56 184 45 238 65 94 52 27 33	2382 516 87 967 683 375 422 740 288 1440 -27 -26 266 739 479 417 526 683 243 784 98 817
APPLIED SOCIAL SCIENCES Business Administration . Education Home Economics Law Physical & Health Education Social Work Other	142 26 35 35 55 32 28 51 18 31 2 2 2 4 2 20	144 21 17 13 66 29 12 14 22 29 15 16 7 13 5 41	326 39 70 46 122 42 9 9 35 36 59 53 34 55 -3 -17	349 30 86 39 144 35 11 11 41 31 54 32 9 9 4 28	613 41 161 52 233 42 16 14 88 51 93 42 18 17 4 22	1574 291 369 369 620 363 76 138 204 352 223 237 70 132 12 120



Table 2 (cont.)

Field and Discipline	1956 t 1958	0	1958 t 1960	.0	t	0	t	0		0	t	0
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
PURE BIOLOGICAL SCIENCES	23	<u>7</u>	42	11	185	45	162	<u>27</u>	237	<u>31</u>	649	187
APPLIED BIOLOGICAL SCIENCES	<u>-6</u>	-1	93	13	228	28	232	22	734	<u>58</u>	1281	178
PURE PHYSICAL SCIENCES	149	19	207	22	433	38	468	30	587	29	1844	237
APPLIED PHYSICAL SCIENCES	81	16	158	27	202	27	154	16	382	35	977	<u>195</u>
TOTAL, ALL FIELDS	599	<u>13</u>	1004	20	2580	43	2806	32	<u>4669</u>	<u>41</u>	11658	268



an interesting institutional development. Departments of economics and political science grew very fast, but much of this growth seems to have resulted from the splitting of existing joint departments. The combined increase, while substantial, stayed below the rates achieved by the other disciplines in this group.

The organizational changes which occurred in Economics and Political Science serve as a reminder of the great institutional changes which were necessary in Canadian education to accommodate the vast increase in the enrolment of university students. While existing institutions grew at a rapid pace, a large number of new colleges and universities was also created. In 1956, at the beginning of the eleven-year period under study, there were 40 AUCC member institutions. In 1968, we had 59.

Growth in applied social science lagged behind the increase in the "pure" disciplines. This is an interesting phenomenon and it may point to a certain imbalance in the development of Canadian higher education.

The three major disciplines in this group - Business Administration,

Education and Law - all showed increases above 350 per cent. In Education, exclusion of OISE, not a member of AUCC, tends to understate actual growth.

Nevertheless, there are indications that the "applied" disciplines are relatively poorly developed. A study of Business Administration currently in progress at the Economic Council will show a relative retardation of business schools. The same study also discovered that the educational gap between Canadian managers and their American counterparts is greater than the gap for any other professional group.

The dramatic increase in the number of university teachers raises one central question: Did the quality of the teaching staff diminish in the



Statistics on the proportion of university teachers holding a Ph.D. degree throw some light on standards. Table 3 contains such data for Canada, broken down by field and discipline. Again, it is illuminating to compare levels in a given year and to trace changes throughout the period. One important difference between fields is immediately apparent. 1967/68, 75 per cent of teachers in Pure Biological Sciences and 73 per cent in Pure Physical Sciences were holding a Ph.D. The corresponding figure for Pure Humanities was only 40 per cent while for the Pure Social Sciences it amounted to 53 per cent. Extension of the comparison over time yields another insight. The proportion of humanists with a doctorate actually declined between 1956/57 and 1967/68, a fact which is not surprising when the magnitude of the expansion is taken into account. The decline occurred after 1960/61; up to that year a slight increase could be noticed. A similar pattern of increase and decline is apparent in the Pure Social Sciences, with a slightly higher percentage figure in 1967/68 than at the beginning of the period. The pure natural sciences, on the other hand, show a quite different pattern. Starting from higher levels, they experienced a steady increase in the proportion of doctorates throughout the period. Overall the gains amounted to 13 percentage points in the Pure Biological Sciences and 7 percentage points in the Pure Physical Sciences.

Comparisons between applied fields have less meaning. In many disciplines in this group the Ph.D. is simply not an appropriate degree.

Lawyers, medical doctors, dentists and veterinarians obtain other terminal degrees. In fields such as Applied Fine Arts, on the other hand, competence will be measured by criteria of a less formalized nature, and the fact that less than 10 per cent of arts teachers have a doctorate is no reason for concern.



<u>Table 3</u>

Proportion of University Teachers in Canada Holding a Ph.D. Degree

1956/57 - 1967/68

By Field and Discipline

	Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
_		%	%	%	%	%	%
	PURE HUMANITIES	<u>45</u>	47	47	41	39	40
	Fine Arts (appreciation)	23	<u>47</u> 32	<u>47</u> 32	24	<u>39</u> 22	<u>40</u> 23
	Classical Language & Literature	49	56	53	41	42	46
	Modern Language & Literature	45	44	45	39	38	39
	English	44	43	45	39	38	39
	French	42	41	39	36	30	36
	Other	48	51	52	43	45	41
	Philosophy	55	56	55	54	50	50
	Religion	36	28	29	29	39	42
	Other	36	48	44	40	40	41
	APPLIED HUMANITIES	26	27	<u>34</u>	<u>31</u>	24	20
	Journalism						
	Library Science				20	11	8
	Theology	51	46	55	51	48	45
	Applied Fine Arts	8	7	10	11	11	8
	Other						25
	PURE SOCIAL SCIENCES	<u>51</u>	<u>53</u>	<u>59</u>	53	53	<u>53</u> 52
	Anthropology	44	58	<u>59</u> 75	61	54	52
	Economics & Political Science	41	47	53	46	45	48
	Economics	40	41	<u>53</u> 47	44	45	49
	Political Science	35	45	54	50	43	47
	Economics & Pol. Science, n.e.c.	44	53	61	47	53	49
	Geography	53	52	55	49	49	51
	History	61	61	58	51	52	52
	Psychology	65	60	71	70	70	64
	Sociology	48	41	56	51	43	49
	Other	17	50	52	54	52	45
	APPLIED SOCIAL SCIENCES	17 14	$\frac{16}{12}$	18	20	19	22
	Business Administration			11	17	19	23
	Education	27	27	27	32	27	30
	Home Economics	4	4	6	9	12	15
	Law	26	17	23	18	17	18
	Physical & Health Education	3	6	9	9	9	9
	Social Work	21	15	18 17	15 14	12 11	14 13
	Other	10	8				
	PURE BIOLOGICAL SCIENCES	62	65	66	67	69	<u>75</u>
	APPLIED BIOLOGICAL SCIENCES	29	33	36	35	38	36
	PURE PHYSICAL SCIENCES	<u>67</u>	68	70	68	71	<u>73</u>
	APPLIED PHYSICAL SCIENCES	20	20	22	30	35	<u>48</u>



It is preferable therefore, to confine comparisons to the pure fields where fewer problems of interpretation exist.

From Table 3 it would appear that growth did not lead to a widespread lowering of standards. This conclusion, which is reassuring in many ways, points to some other problems, however. It must be clear to anyone who is even remotely familiar with student-teacher ratios in graduate schools that no educational system can produce enough qualified people to staff its own expansion at the observed rates. Only by attracting large numbers of social scientists and humanists from abroad was it possible to go through this period of rapid growth without lowering the proportion of teachers holding a Ph.D. to a marked extent. Unfortunately, the present set of data does not include information on the origin of university teachers, and questions relating to the foreign component of the teaching force cannot be pursued any further here.

3. The Regional Pattern

With the great expansion in higher education, it is interesting to ask how different regions have shared in the pattern of growth. In order to deal with the regional distribution of university teachers, we have repeated the major tabulations, prepared for the country as a whole, separately for each of four geographic areas: the Atlantic Provinces, Quebec, Ontario, and the Western Provinces.

Table 4 presents the number of university teachers in 1967/68 by region and discipline. It is derived from more detailed tables in Appendix A giving data on the whole period for each geographic area. In 1967/68, Ontario had the largest number of university teachers, making up



<u>Table 4</u>

<u>Number of University Teachers in 1967/68</u>

By Province, Field and Discipline

Field and Discipline	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek	359 9 32	669 53 57 1	1547 83 117 5	950 112 44	3525 257 250 6
Latin Other Modern Language & Literature English	2 30 <u>262</u> 129	6 50 408 149	5 107 <u>988</u> 435	1 43 <u>656</u> 380	14 230 <u>2314</u> 1093
French Other Philosophy Religion Other	74 59 51 3 2	119 140 98 44 9	266 287 226 37 96	102 174 93 8 37	561 660 468 92 144
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	1 31 35	114 10 45 58 1	119 8 29 50 32	116 11 2 84 19	416 8 51 128 209 20
PURE SOCIAL SCIENCE Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	283 3 88 43 28 17 6 85 62 23 16	531 16 151 83 37 31 62 92 112 56 42	1199 31 379 209 163 7 136 260 243 99 51	831 46 247 144 80 23 98 157 186 96 1	2844 96 865 479 308 78 302 594 603 274 110
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	230 58 76 17 22 53 1	461 137 153 21 78 36 26 10	518 154 58 38 106 116 37 9	906 120 504 55 56 112 59	2115 469 791 131 262 317 123 22



Table 4 (cont.)

Field and Discipline	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
PURE BIOLOGICAL SCIENCES	90	189	427	290	996
APPLIED BIOLOGICAL SCIENCES	124	579	685	614	2002
PURE PHYSICAL SCIENCES	315	546	981	<u>781</u>	2623
APPLIED PHYSICAL SCIENCES	136	377	622	344	1479
TOTAL, ALL FIELDS	1604	3466	6098	4832	16000



38 per cent of the total. It was followed by the Western Provinces with 30 per cent, Quebec with 22 per cent and the Atlantic Provinces with 10 per cent. With a few exceptions, the same ranking applied to individual fields and disciplines, although the relevant percentage figures show considerable variations.

While data on geographic distribution are of great interest, one must interpret them with care. The major pitfalls for the analyst arise from variations in educational structure. Quebec has a system of higher education which differs considerably from the system common to the English-speaking provinces. I am not referring here to the recent creation of the CEGEP but to the system of classical colleges which played an important role throughout the period being discussed. These colleges, generally affiliated with the University of Montreal or with Laval University, provided instruction similar to that given in the first three years of English-speaking universities. Yet most of them are not included in our sample and the Quebec system is represented only in truncated form. Exclusion of institutions is not the only problem, however. One must realize that an educational system which relies on two interlocking sets of institutions will have different student-teacher ratios and, most likely, different average teacher characteristics from one based on the type of institution which combines undergraduate and graduate instruction.

The regional distribution of teachers in 1967/68 reflects changes which occurred over the preceding period. As shown in Table 5 there was considerable variation in rates of expansion among the four regions. The Western Provinces surged ahead, increasing their teaching force by



 $\frac{\text{Table 5}}{\text{Increase in the Number of University Teachers in 1956/57 - 1967/68}}$

By Province, Field and Discipline

Field and Discipline	Atlan Provi		Que	ebec	Onta	ırio	West		Can	ıada
	No.	%	No.	%	No.	%	No.	%	No.	%
PURE HUMANITIES	265	282	472	240	1199	345	762	405	2698	326
Fine Arts (appreciation)	7	350	51	2550	61	277	107	2140	226	729
Classical Language & Literature	17	113	33	138	63	117	29	193	142	131
Greek			- 5	-83	3	150			-2	-25
Latin			-1	-14	-1	-17	1		-1	- 7
Other	17	131	39	355	61	133	28	186	145	170
Modern Language & Literature	202	337	307	304	791	402	518	375	1818	367
English	99	330	114	326	341	363	301	381	855	359
French	59	393	97	441	221	491	81	386	458	445
Other	44	293	96	218	.229	394	136	357	505	325
Philosophy	40	364	51	109	168	290	84	933	343	274
Religion	-2	-40	34	340	31	517	7	700	70	318
Other	1	100	-4	-31	85	773	17	85	99	220
APPLIED HUMANITIES	40	148	<u>77</u>	208	<u>49</u>	<u>70</u>	87	300	253	155
Journalism		-100			4	100			1	14
Library Science	-1	-50	4	67	20	222	11		34	200
Theology	27	675	27	150	5	11	-2	-50	57	80
Applied Fine Arts	9	180		1050	21	700	30	231	141	207
Other	8	61	25	227	-1	-11	48	400	20	
PURE SOCIAL SCIENCE	222	364	<u>424</u>	396	997	494	739	803	2382	<u>516</u>
Anthropology	2	200	15	1500	24	343	46		87	967
Economics & Political Science	66	300	111	277	295	351	211	586	683	375
Economics	31	258	66	388	190	1000	135	1500	422	740
Political Science	25	833	34	1133	156	2229	73	1043	288	1440
Economics & Pol. Science, n.e.c.	10	143	11	55	- 51	-88	3	15	-27	-26
Geography	5	500	51	464	118	656		1533	266	739
History	65	325	77	513	208	400	129	461	479	417
Psychology	54	675	91	433	206	557		1591	526	683
Sociology	17	283	42	300		2375		1271	243	784
Other	13	433	37	740	51		-3	- 75	98	817
APPLIED SOCIAL SCIENCES	168	271	336	269	360	228	710	362	1574	291
Business Administration	50	625	113	471	111	258	95	380	369	369
Education	53	230	115	303	25	76	427	555	620	363
Home Economics	6	55	13	163	30	375	27	96	76	138
Law	14	175	61	359	86	430	43	331	204	352
Physical & Health Education	46	657	22	157	80	222	75	203	223	237
Social Work	1		2	8	24	185	43	269	70	132
Other	-2	-40	10		4	80			12	120



Table 5 (cont.)

Field and Discipline	Atlan Provi		Que	bec	Onta	rio	West Provi		Can	ada	
	No.	%	No.	%	No.	%	No.	%	No.	%	
PURE BIOLOGICAL SCIENCES	58	181	111	142	273	<u>177</u>	207	<u>249</u>	649	187	
APPLIED BIOLOGICAL SCIENCES	102	464	<u>456</u>	<u>371</u>	<u>342</u>	100	381	164	1281	178	
PURE PHYSICAL SCIENCES	221	<u>235</u>	355	186	667	<u>212</u>	<u>601</u>	334	1844	237	
APPLIED PHYSICAL SCIENCES	89	189	<u>250</u>	197	437	236	201	141	977	195	
TOTAL, ALL FIELDS	1165	<u>265</u>	2481	251	<u>4324</u>	243	3688	<u>322</u>	11658	268	
PURE PHYSICAL SCIENCES APPLIED PHYSICAL SCIENCES	<u>221</u> <u>89</u>	235 189	<u>355</u> <u>250</u>	<u>186</u> <u>197</u>	<u>667</u> <u>437</u>	<u>212</u> <u>236</u>	<u>601</u> <u>201</u>	<u>334</u> <u>141</u>	<u>1844</u> <u>977</u>	237 195	



3,688 members or 322 per cent. They were followed by the Atlantic Provinces (265 per cent), Quebec (251 per cent) and Ontario (243 per cent). It is interesting to note that Ontario alone added 4,324 teachers, a figure which may be compared to the 4,342 faculty members who, according to Table 1, made up the entire teaching force for Canada in 1956/57. Quebec, while experiencing rates of growth comparable to those of the other regions, showed smaller absolute increases than either Ontario or the West, thus failing to gain in relation to the rest of Canada. One must again keep in mind, however, that the Quebec system is not fully represented in the data. In addition, it is possible that the recent changes which led to the creation of the CEGEP may alter the province's relative position in the years to come.

We have argued previously that the proportion of university teachers holding a Ph.D. degree can serve as an index of staff quality. Table 6 shows this proportion for 1967/68 by region and discipline. If we focus on the "pure" fields, where comparisons have a well-defined meaning, Ontario stands out as the region with the best-qualified teaching force. The Atlantic Provinces, on the other hand, are at the bottom of the scale. The fact that only 28 per cent of teachers in the pure humanities have a Ph. D. in this region while the figure for Canada as a whole is 40 per cent serves to indicate the gap. Second and third rank are shared by Quebec and the Western Provinces. However, the figures on Quebec may again be misleading. If a large proportion of pupils enroled in the new CEGEP will transfer to university later on, one should in effect include part of the teaching staff in these institutions to achieve comparability. It is likely that such a revision would result in a downward adjustment of the figures.



Table 6 Proportion of University Teachers Holding a Ph.D. Degree 1967/68

By Province, Field and Discipline

Field and Discipline	Atlantic Provinces	Quebec	Ontario	Western Provinces	Canada
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Modern Language & Literature English French Other Philosophy Religion Other	28 11 34 26 31 16 25 33 100	41 26 51 39 31 34 51 49 34 89	45 29 45 44 47 41 43 59 46 40	35 19 52 37 36 40 36 38 50 35	40 23 46 39 39 36 41 50 42 41
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	<u>15</u> 23 8	26 10 49 12	2 <u>7</u> 3 54 12	9 18 50 3 26	8 45 8 25
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	41 33 32 42 29 18 33 36 56 52 44	48 75 43 36 43 61 44 49 58 38 50	58 48 49 51 48 43 57 62 74 49 43	52 48 54 55 54 57 49 46 58 53	53 52 48 49 47 49 51 52 64 49
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	13 3 28 12 5 8	23 22 24 10 33 8 15 20	19 33 22 24 11 5 22	25 22 33 11 16 13 8	22 23 30 15 18 9 14 13
PURE BIOLOGICAL SCIENCES	<u>67</u>	80	75	<u>75</u>	<u>75</u>
APPLIED BIOLOGICAL SCIENCES	17	41	30	43	<u>36</u>
PURE PHYSICAL SCIENCES	58	<u>65</u>	<u>81</u>	74	<u>73</u>
APPLIED PHYSICAL SCIENCES	32	<u>42</u>	<u>55</u>	<u>47</u>	48



4. Other Characteristics

While the results given in the preceding sections represent the core of the analysis, it may be useful to discuss briefly two additional characteristics for which tabulations were prepared. Data on the first one - median age - appear in Table 7, arranged by field and selected discipline. The table was constructed mainly to determine whether rapid growth has resulted in a markedly younger population of university teachers. It shows that the impact was indeed considerable in some fields, notably the Pure Humanities and the Applied Social Sciences. While less pronounced, a downward trend can also be found in all other major fields. Perhaps it should be pointed out that Table 7 is derived from data on all institutions contained in the DBS surveys rather than from data on AUCC members. However, there is little reason for expecting a difference in age patterns and the table is, in all likelihood, representative for both groups.

The final characteristic to be dealt with here is academic rank.

Table 8 shows the percentage distribution of university teachers in 1967/68 by field, discipline and rank. Generally, the social sciences and the humanities have a lower proportion of full and associate professors than the natural sciences, a conclusion which is not unexpected in view of the differences in growth rates for the preceding period. In addition, the pure humanities appear unique in their heavy reliance on lecturers and instructors. It is interesting to speculate on whether this latter discrepancy merely reflects a different use of titles or whether it is related to different teaching methods or different labor market conditions for the humanities.

Unfortunately, our data do not allow us to pursue the question beyond the realm of speculation.



Table 7

Median Age of University Teachers in Canada 1956/57 - 1967/68

By Field and For Selected Disciplines*

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES	41.0	41.0	39.0	38.0	37.0	37.0
Fine Arts (appreciation)	45.0	41.0	42.5	43.0	41.0	40.0
Classical Language & Literature	42.0	43.0	42.0	41.0	38.5	37.0
Greek	33.0	37.0	42.0	47.0	39.0	42.0
Latin	40.0	34.5	35.0	38.0	37.0	40.5
Modern Language & Literature	41.0	41.0	39.0	38.0	37.0	36.0
English	39.0	39.0	38.0	37.0	35.0	35.0
French	42.0	41.0	40.0	38.5	37.0	36.0
Philosophy	40.0	38.0	38.0	38.0	37.0	37.0
Religion	43.5	40.0	41.0	37.0	36.0	38.0
Other	40.5	42.0	41.0	39.0	39.0	39.5
APPLIED HUMANITIES	42.0	44.0	44.0	43.0	44.0	41.0
Journalism	39.0	44.0	45.0	48.0	48.5	44.0
Library Science	48.0	52.5	54.0	50.0	49.0	47.0
Theology	43.0	43.5	45.0	46.0	44.5	42.0
PURE SOCIAL SCIENCES	37.0	38.0	38.0	37.0	36.0	35.0
Anthropology	36.0	37.0	37.0	38.0	36.5	35.0
Economics	36.0	38.0	36.0	37.0	36.0	35.0
Political Science	33.5	36.0	36.0	36.0	35.0	34.0
Economics & Pol. Science, n.e.c.	37.0	37.0	39.0	38.0	35.0	35.5
Geography	36.0	37.0	36.5	36.0	36.0	35.0
History	39.0	39.0	39.0	37.0	36.0	36.0
Psychology	38.5	38.0	38.5	37.0	36.0	35.0
Sociology	35.0	37.5	39.0	38.0	37.0	37.0
Other	40.0	38.0	41.0	37.0	35.0	37.0
APPLIED SOCIAL SCIENCES	41.0	40.0	39.0	39.0	39.0	38.0
Business Administration	35.5	34.0	35.0	37.0	36.0	37.0
Education	45.0	45.0	44.0	43.0	42.0	43.0
Home Economics	41.0	40.0	39.0	42.0	40.0	41.0
Law	36.5	34.0	34.0	34.0	34.0	33.5
Physical & Health Education	34.5	35.0		35.0 43.0	33.0 44.0	32.0 44.0
Social Work	44.5	45.0	44.0	43.0	44.0	44.0
PURE BIOLOGICAL SCIENCES	40.0	40.0	<u>40.0</u>	<u>40.0</u>	38.0	39.0
APPLIED BIOLOGICAL SCIENCES	39.0	41.0	40.0	42.0	41.0	40.0
PURE PHYSICAL SCIENCES	<u>37.0</u>	38.0	37.0	37.0	<u>36.0</u>	36.0
APPLIED PHYSICAL SCIENCES	38.0	37.0	37.0	37.0	38.0	37.0

^{*}The Table is derived from data on \underline{all} institutions included in the D.B.S. surveys and listed as such in Appendix C.

For other explanatory notes, see Table 1.



Rank Distribution of University Teachers in Canada 1967/68 By Field and for Selected Disciplines

Field and Discipline	Ful1	Assoc.	Assist.	Prof.	Lecturer and	All Teaching
	Prof.	Prof.	Prof.	non Graded	Instruct.	Staff *
PURE HUMANITIES Fine Arts (appreciation Classical Language & Literature Greek	14 13 18 67	19 25 24 33	36 38 35	<u>1</u> 3 2	30 21 22	100 100 100 100
Latin Modern Language & Literature English French Philosophy Religion Other	14 12 13 13 17 15 20	14 17 18 14 24 12	36 35 33 37 36 42 32	1 1 1 1 3	36 34 36 35 22 29 26	100 100 100 100 100 100 100
APPLIED HUMANITIES Journalism Library Science Theology	15 13 18 23	25 38 33 26	37 38 43 30	<u>1</u> 1	22 13 6 21	$\frac{100}{100}$ 100 100
PURE SOCIAL SCIENCES Anthropology Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	17 17 19 18 24 16 18 15 16	23 23 25 23 26 25 21 25 19 21	42 47 40 39 40 44 42 42 44	1 1 1 1	17 14 15 19 10 14 19 16 21	100 100 100 100 100 100 100 100 100
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work	14 17 13 8 24 6 13	25 26 29 18 29 16 24	38 36 39 41 39 34 38	$\frac{1}{\overline{1}}$ 2	22 20 17 33 7 44 24	100 100 100 100 100 100
PURE BIOLOGICAL SCIENCES	25	29	<u>35</u>		10	100
APPLIED BIOLOGICAL SCIENCES	22	25	31	4		
PURE PHYSICAL SCIENCES	21	27	39	<u>=</u>	18	100
APPLIED PHYSICAL SCIENCES	21	34	34	=	12 11	100 100

^{*} Percentage figures may not add up exactly to 100 because of rounding.

For other explanatory notes see Table 1.



5. Summary and Conclusion

The statistical material presented in this paper gives the basis for an understanding of faculty distribution and growth in Canadian universities. In conclusion, one cannot help but stress the magnitude of faculty expansion over the past eleven years. Between 1956/57 and 1967/68, the number of university teachers in AUCC institutions nearly quadrupled. Ontario alone added as many members of academic staff during this period as there were in 1956/57 for all of Canada. Yet Ontario was not the fastest growing region, a place of honor which fell to the Western Provinces. There were interesting differences among fields as well. Growth in the social sciences and the humanities by far outpaced development in the natural sciences.

Differences in growth were paralleled by differences in academic preparation. The proportion of university teachers holding a Ph. D. degree was appreciably lower in the social sciences and humanities than in the natural sciences. In fact, the gap widened over the period. While the percentage of natural scientists with a doctorate increased slowly but steadily, the level of qualifications stayed more or less the same for teachers in the social sciences and humanities. Regarding regional patterns, Ontario has the best-qualified teaching force while university staff in the Atlantic Provinces shows a lower proportion of doctorates than the rest of Canada.

While the presentation of data on trends and patterns of distribution has been the main aim of this paper, it was possible in passing to draw attention to two problems which require analysis in depth rather than descriptive treatment. The first of the two - the difference in educational structure in the Province of Quebec - has implications for comparative analysis which are not



fully understood and which have, to the knowledge of this author, never been studied systematically. The second problem is one which was pin-pointed with a more tentative diagnosis. It is possible that the applied social sciences and humanities in Canada have not shared adequately in the great expansion. If this should turn out to be the case, Canada may well experience periods of labor market imbalance in the years to come.

Finally, one last aim which the paper set out to accomplish should not be forgotten. By conducting independent tabulations on DBS data, it has been possible to gain an exact understanding of the quality of the statistical material which appears in the Bureau's publications on academic staff. In doing this, the paper should help Council policy which in most cases must take its departure from published figures. Perhaps the report can serve as a precedent for future work by demonstrating how basic information can be improved without independent data collection on the Canada Council's part.



APPENDICES

- Appendix A: Regional Distribution of University Teachers 1956/57 1967/68

 By Field and Discipline (AUCC Institutions)
 - Table A.1 Number of University Teachers in the Atlantic Provinces
 - Table A.2 Number of University Teachers in Quebec
 - Table A.3 Number of University Teachers in Ontario
 - Table A.4 Number of University Teachers in the Western Provinces
- Appendix B: Number of University Teachers in All Institutions Included in the Surveys. 1956/57 1967/68

 By Field and Discipline
 - Table B.1 Number of University Teachers in Canada
 - Table B.2 Number of University Teachers in the Atlantic Provinces
 - Table B.3 Number of University Teachers in Quebec
 - Table B.4 Number of University Teachers in Ontario
 - Table B.5 Number of University Teachers in the Western Provinces
- Appendix C: List of Institutions and Years in which They Were Included
 - Table C.1 Institutions Included in DBS Survey -- AUCC Member Institutions
 - Table C.2 Other Institutions of Post-Secondary Education Included in DBS Survey



Table A.1

Number of University Teachers in the Atlantic Provinces 1956/57 - 1967/68

By Field and Discipline (AUCC Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	94 2 15 2 13 60 30 15 15 11 5	147 4 22 1 5 16 91 46 26 19 19	150 3 20 2 7 11 99 46 33 20 19 7 2	239 7 30 8 22 153 75 45 33 35 12 2	307 12 30 4 26 205 100 64 41 41 18	359 9 32 2 30 262 129 74 59 51 3 2
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	27 3 2 4 18	2 <u>4</u> 1 7 16	30 1 9 20	2 7 23	1 8 22	67 1 31 35
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	61 1 22 12 3 7 1 20 8 6 3	21 15 5 1 1 22 10 7	80 1 26 17 4 5 1 26 11 8 7	139 2 44 29 12 3 3 44 25 16 5	189 61 33 21 7 5 56 33 20 14	283 3 88 43 28 17 6 85 62 23 16
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	62 8 23 11 8 7	77 13 32 11 10 6	88 16 35 11 10 9	129 25 54 9 12 23	135 30 48 14 14 23	230 58 76 17 22 53 1 3

See Table 1 for explanatory notes.

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Table A.1 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	32	38	36	<u>54</u>	<u>70</u>	90
APPLIED BIOLOGICAL SCIENCES	22	<u>36</u>	40	<u>63</u>	80	124
PURE PHYSICAL SCIENCES	94	125	136	186	223	315
APPLIED PHYSICAL SCIENCES	47	<u>62</u>	72	101	115	136
TOTAL, ALL FIELDS	439	580	632	943	1150	1604



Table A.2

Number of University Teachers in Quebec 1956/57 - 1967/68

By Field and Discipline (AUCC Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	197 2 24 6 7 11 101 35 22 44 47 10	165 2 12 1 1 10 89 39 20 30 44 8 10	176 2 17 2 4 11 103 44 21 38 44 5	363 4 33 2 8 23 239 92 62 85 72 8	523 20 42 3 8 31 344 128 126 90 83 23 11	669 53 57 1 6 50 408 149 119 140 98 44
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	37 6 18 13	33 5 22 6	46 5 34 7	58 10 33 15	94 11 49 34	114 10 45 58 1
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	107 1 40 17 3 20 11 15 21 14 5	125 1 42 21 3 18 15 19 24 16 8	130 4 41 21 7 13 21 22 23 16 3	252 8 89 49 25 15 31 51 38 29 6	377 11 109 56 32 21 44 68 77 41 27	531 16 151 83 37 31 62 92 112 56 42
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	125 24 38 8 17 14 24	153 38 50 15 22 5 23	166 40 49 17 22 8 27 3	274 56 100 24 38 15 38	348 100 95 21 52 35 40	461 137 153 21 78 36 26 10



Table A.2 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	<u>78</u>	89	86	128	<u>173</u>	189
APPLIED BIOLOGICAL SCIENCES	123	135	<u>150</u>	247	327	579
PURE PHYSICAL SCIENCES	191	243	278	372	500	546
APPLIED PHYSICAL SCIENCES	127	126	152	215	267	<u>377</u>
TOTAL, ALL FIELDS	985	1069	1184	1909	2609	3466



Table A.3

Number of University Teachers in Ontario 1956/57 - 1967/68

By Field and Discipline (AUCC Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	348	411	513	717	1055	1547
	22	23	23	29	38	83
	54	55	66	77	91	117
	2	2	2	1	1	5
	6	11	14	12	10	5
	46	42	50	64	80	107
	197	233	297	431	671	988
	94	110	131	193	300	435
	45	58	83	113	166	266
	58	65	83	125	205	287
	58	71	89	127	168	226
	6	11	15	22	32	37
	11	18	23	31	55	96
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	70	57	55	64	78	119
	4	5	4	4	6	8
	9	4	2	3	16	29
	45	44	46	51	30	50
	12	4	3	6	26	32
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	202 7 84 19 7 58 18 52 37 4	245 8 99 26 11 62 23 58 49 8	312 8 126 27 18 81 29 77 60 12	488 10 163 53 42 68 56 115 96 35 13	767 18 238 86 74 78 84 179 154 67 27	1199 31 379 209 163 7 136 260 243 99 51
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	158	203	212	254	342	518
	43	49	54	74	91	154
	33	36	24	7	42	58
	8	26	28	36	37	38
	20	28	42	55	67	106
	36	40	39	54	80	116
	13	17	18	23	19	37
	5	7	7	5	6	9

See Table 1 for explanatory notes.

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Table A.3 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	<u>154</u>	148	178	239	<u>307</u>	427
APPLIED BIOLOGICAL SCIENCES	343	302	309	354	<u>405</u>	685
PURE PHYSICAL SCIENCES	<u>314</u>	308	396	556	754	981
APPLIED PHYSICAL SCIENCES	185	209	<u>291</u>	<u>374</u>	444	622
TOTAL, ALL FIELDS	1774	1883	2266	3046	4152	6098



Appendix A Table A.4

Number of University Teachers in the Western Provinces 1956/57 - 1967/68

By Field and Discipline

(AUCC Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature	188 5 15	228 9 16	302 9 24	499 44 29	676 74 32	950 112 44
Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	15 138 79 21 38 9 1 20	16 <u>171</u> 103 41 27 19 1	1 23 232 148 47 37 23 1	4 25 360 208 79 73 40 3 23	4 28 465 272 76 117 65 6	1 43 656 380 102 174 93 8 37
APPLIED HUMANITIES	29	31	39	43	52	116
Journalism Library Science Theology Applied Fine Arts Other	4 25	3 28	3 36	5 3 34 1	7 2 42 1	11 2 84 19
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	92 36 9 7 20 6 28 11 7 4	125 3 46 20 14 12 13 29 22 8 4	189 3 59 35 21 3 23 44 28 21 11	334 8 112 73 37 2 42 74 53 28 17	520 19 166 109 57 60 107 101 52 15	831 46 247 144 80 23 98 157 186 96
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	196 25 77 28 13 37 16	250 35 108 31 16 45 15	361 42 184 39 24 55 17	496 67 253 35 28 78 35	677 87 373 43 41 86 46	906 120 504 55 56 112 59



Table A.4 (cont.)

1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
83	95	112	176	209	290
233	242	309	<u>372</u>	456	614
180	252	325	454	559	781
143	186	226	253	271	344
1144	1409	1863	2627	3420	4832
	83 233 180 143	83 95 233 242 180 252 143 186	83 95 112 233 242 309 180 252 325 143 186 226 1144 1409 1863	83 95 112 176 233 242 309 372 180 252 325 454 143 186 226 253 1144 1409 1863 2627	233 242 309 372 456 180 252 325 454 559 143 186 226 253 271 1144 1409 1863 2627 3420

See Table 1 for explanatory notes.



Appendix B

Table B.1

Number of University Teachers in Canada 1956/57 - 1967/68

By Field and Discipline

(All Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES	885	1074	1276	1956	2714	3600
Fine Arts (appreciation)	31	39	38	85	145	261
Classical Language & Literature	115	131	158	191	216	253
Greek	9	11	15	10	12	7
Latin	18	34	43	45	39	16
Other	87	86	100	136	165	230
Modern Language & Literature	513	632	787	1241	1758	2350
English	244	315	385	585	819	1106
French	110	175	224	338	483	584
Other	159	142	178	318	456	660
Philosophy	143	181	210	316	393	489
Religion	26	39	35	58	100	103
Other	57	52	48	65	102	144
APPLIED HUMANITIES	181	<u>173</u>	204	226	270	427
Journalism	7	5	4	4	6	8
Library Science	17	10	13	25	35	52
Theology	87	100	118	117	100	137
Applied Fine Arts	70	58	69	79	128	210
Other				1	1	20
PURE SOCIAL SCIENCES	477	583	726	1234	1899	2906
	9	583 12	17	29	48	96
Anthropology Franchist & Political Science	183	208	253	409	580	869
Economics & Political Science	58	82	$\frac{255}{101}$	205	287	482
Economics Political Science	20	33	50	116	186	309
	105	93	102	88	107	78
Economics & Pol. Science, n.e.c.	37	52	74	134	200	306
Geography	121	141	181	297	431	605
History	81	107	123	215	372	634
Psychology	31	40	57	108	182	282
Sociology Other	15	23	21	42	86	114
Other	1.5	23	<u> </u>	7.2		
APPLIED SOCIAL SCIENCES .	<u>541</u>	686	893	1259	1603	2274
Business Administration	100	136	152	222	308	472
Education	171	226	352	512	652	937
Home Economics	55	83	95	104	115	131
Law	58	76	98	133	174	262
Physical & Health Education	94	98	117	178	231	327
Social Work	53	55	62	96	105	123
Other	10	12	17	14	18	22



Table B.1 (cont.)

1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
349	375	416	605	776	1005
721	715	808	1036	1296	2002
808	967	1182	1622	2108	2668
502	583	741	943	1097	1482
4464	5156	6246	8881	11762	16364
	349 721 808 502 4464	349 375 721 715 808 967 502 583 4464 5156	349 375 416 721 715 808 808 967 1182 502 583 741 4464 5156 6246	349 375 416 605 721 715 808 1036 808 967 1182 1622 502 583 741 943 4464 5156 6246 8881	721 715 808 1036 1296 808 967 1182 1622 2108 502 583 741 943 1097 4464 5156 6246 8881 11762



Appendix B

Table B.2

Number of University Teachers in the Atlantic Provinces 1956/57 - 1967/68

By Field and Discipline

(All Institutions)

·						
Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES	103	<u>173</u>	162	248	316	<u>381</u>
Fine Arts (appreciation)	2	4	3	7	12	10
Classical Language & Literature	<u>17</u>	<u>27</u> 2	<u>24</u> 3	30	30	32
Greek						
Latin	4	9	10	8	4	2
Other	13	16	11	22	26	30
Modern Language & Literature	<u>63</u>	102	104	157	212	275
English	30	50	48	76	102	133
French	16	33	36	48	69	83
Other	17	19	20	33	41	59
Philosophy	14	22 11	22	38 14	42 19	55 7
Religion	6 1	7	7 2	2	1	2
Other	T	/	2	4	1	2
APPLIED HUMANITIES	27	24	30	<u>32</u>	31	68
Journalism	<u>27</u> 3					
Library Science	2	1	1	2	1	1
Theology	4	7	9	7	8	31
Applied Fine Arts	18	16	20	23	22	36
Other						
PURE SOCIAL SCIENCES	64	76	<u>83</u>	140	194	291
Anthropology		0.1		2	6.0	
Economics & Political Science	<u>22</u> 12	21	$\frac{26}{17}$	44	62	<u>89</u> 44
Economics		15		29 12	34 21	28
Political Science	3 7	5 1	4 5	3	7	17
Economics & Pol. Science, n.e.c.	1	1	1	3	6	7
Geography History	23	26	29	45	58	88
Psychology	8	10	11	25	34	63
Sociology	6	8	8	16	20	25
Other	3	10	7	5	14	16
APPLIED SOCIAL SCIENCES	62	78	88	130	135	231
Business Administration	8	14	16	25	30	59
Education	23	32	35	54	48	76
Home Economics	11	11	11	9	14	17
Law	8	10	10	12	14	22
Physical & Health Education	7	6	9	24	23	53
Social Work						1
Other	5	5	7	6	6	3



Table B.2 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	<u>32</u>	38	<u>36</u>	<u>54</u>	<u>72</u>	93
APPLIED BIOLOGICAL SCIENCES	22	36	<u>40</u>	<u>63</u>	80	124
PURE PHYSICAL SCIENCES	99	133	143	191	226	323
APPLIED PHYSICAL SCIENCES	<u>47</u>	<u>62</u>	72	101	115	136
TOTAL, ALL FIELDS	456	620	654	959	1169	1647



Appendix B Table B.3

Number of University Teachers in Quebec 1956/57 - 1967/68

By Field and Discipline (All Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68		
PURE HUMANITIES	246	262	299	492	662 21	717		
Fine Arts (appreciation)	2	3	3	5		56		
Classical Language & Literature	<u>29</u> 7	<u>33</u> 7	44	<u>55</u> 9	$\frac{63}{11}$	<u>60</u> 2		
Greek	9	14	10 18	21	21	8		
Latin Other	13	12	16	25	31	50		
Modern Language & Literature	115	126	154	293	406	427		
English	41	52	58	108	143	155		
French	28	43	58	98	170	132		
Other	46	31	38	87	93	140		
Philosophy	62	69	76	111	117	114		
Religion	13	16	12	19	43	51		
Other	25	15	10	9	12	9		
CHEL	23		10					
APPLIED HUMANITIES	<u>55</u>	<u>54</u>	68	74	98	115		
Journalism								
Library Science	6	5	5	10	11	11		
Theology	34	39	53	48	51	45		
Applied Fine Arts	15	10	10	16	36	58		
Other						1		
PURE SOCIAL SCIENCES	119	137	142	271	409	<u>547</u>		
Anthropology	1	1	5	9	11	16		
Economics & Political Science	41	42	42	90	112	153		
Economics	18	21	22	50	57	84		
Political Science	3	3	7	25	34	38		
Economics & Pol. Science, n.e.c.	20	18	13	15	21	31		
Geography	12	15	21	33	50	64		
History	18	28	31	63	86	97		
Psychology	25	26	24	40	79	112		
Sociology	14	16	16	29	42	59		
Other	8	9	3	7	29	46		
APPLIED SOCIAL SCIENCES	125 24	155	169	<u>278</u> 56	<u>353</u>	<u>462</u>		
Business Administration	24	38	40	56	100	137		
Education	38	50	50	101	95	153		
Home Economics	8	15	17	24	21	21		
Law	17	22	22	38	52	78		
Physical & Health Education	14	7	10	18	40	37		
Social Work	24	23	27	38	40	26		
Other			3	3	5	10		

See Table 1 for explanatory notes on the definition of terms.



Table B.3 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	80	94	90	136	186	194
APPLIED BIOLOGICAL SCIENCES	123	135	150	247	350	579
PURE PHYSICAL SCIENCES	215	274	318	421	<u>565</u>	580
APPLIED PHYSICAL SCIENCES	127	126	152	215	267	<u>377</u>
TOTAL, ALL FIELDS	1090	1237	1388	2134	2890	3571



Appendix B

Table B.4

Number of University Teachers in Ontario 1956/57 - 1967/68

By Field and Discipline

(All Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek Latin Other Modern Language & Literature English French Other Philosophy Religion Other	348 22 54 2 6 46 197 94 45 58 58 6 11	411 23 55 2 11 42 233 110 58 65 71 11 18	513 23 66 2 14 50 297 131 83 83 89 15 23	717 29 77 1 12 64 431 193 113 125 127 22 31	1055 38 91 1 10 80 671 300 166 205 168 32 55	1548 83 117 5 5 107 988 435 266 287 227 37 96
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	70 4 9 45 12	64 5 4 51 4	67 4 7 53 3	77 4 8 59 6	87 6 16 39 26	128 8 29 59 32
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	202 7 84 19 7 58 18 52 37 4	245 8 99 26 11 62 23 58 49 8	312 8 126 27 18 81 29 77 60 12	489 10 163 53 42 68 56 115 97 35 13	767 18 238 86 74 78 84 179 154 67 27	1231 31 379 209 163 7 136 262 271 101 51
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	158 43 33 8 20 36 13 5	203 49 36 26 28 40 17	275 54 83 28 42 43 18 7	355 74 104 36 55 58 23 5	435 91 135 37 67 80 19 6	673 156 204 38 106 123 37

See Table 1 for explanatory notes on the definition of terms.



Table B.4 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	<u>154</u>	148	178	239	307	<u>427</u>
APPLIED BIOLOGICAL SCIENCES	<u>343</u>	302	309	<u>354</u>	<u>409</u>	685
PURE PHYSICAL SCIENCES	314	308	396	556	<u>754</u>	981
APPLIED PHYSICAL SCIENCES	185	209	291	<u>374</u>	444	625
TOTAL, ALL FIELDS	1774	1890	2341	3161	4258	6298



Table B.5

Number of University Teachers in the Western Provinces 1956/57 - 1967/68

By Field and Discipline

(All Institutions)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE HUMANITIES Fine Arts (appreciation) Classical Language & Literature Greek	188 5 15	228 9 16	302 9 24	499 44 29	681 74 32	954 112 44
Latin Other Modern Language & Literature English French Other Philosophy Religion	15 138 79 21 38 9 1 20	16 171 103 41 27 19 1	1 23 232 148 47 37 23 1	25 360 208 79 73 40 3 23	28 469 274 78 117 66 6	1 43 660 383 103 174 93 8 37
APPLIED HUMANITIES Journalism Library Science Theology Applied Fine Arts Other	<u>29</u> 4 25	31 3 28	39 3 36	<u>43</u> 5 3 34 1	54 7 2 44 1	116 11 2 84 19
PURE SOCIAL SCIENCES Anthropology Economics & Political Science Economics Political Science Economics & Pol. Science, n.e.c. Geography History Psychology Sociology Other	92 36 9 7 20 6 28 11 7 4	125 3 46 20 14 12 13 29 22 8 4	189 3 59 35 21 3 23 44 28 21 11	334 8 112 73 37 2 42 74 53 28 17	529 19 167 110 57 1 60 108 105 53 16	837 46 248 145 80 23 99 158 188 97
APPLIED SOCIAL SCIENCES Business Administration Education Home Economics Law Physical & Health Education Social Work Other	196 25 77 28 13 37 16	250 35 108 31 16 45 15	361 42 184 39 24 55 17	496 67 253 35 28 78 35	87 374 43 41 88 46	908 120 504 55 56 114 59

See Table 1 for explanatory notes on the definition of terms.



Table B.5 (cont.)

Field and Discipline	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68
PURE BIOLOGICAL SCIENCES	83	<u>95</u>	112	176	211	<u>291</u>
APPLIED BIOLOGICAL SCIENCES	233	242	309	<u>372</u>	<u>456</u>	<u>614</u>
PURE PHYSICAL SCIENCES	180	252	325	454	563	784
APPLIED PHYSICAL SCIENCES	143	186	226	253	271	344
TOTAL, ALL FIELDS	1144	1409	1863	2627	3445	4848



Institutions Included in DBS Survey

AUCC Member Institutions

	Years Included							
Name	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68		
Acadia University	X	X	X	X	X	X		
Alberta, The University of	X	x	X	X	X	X		
Bishop's University	X	X	X	X	X	X		
Brandon University		X	X	X	X	X		
British Columbia, The University of	X	X	X	X	X	X		
Brock University					X	X		
Calgary, The University of					X	X		
Carleton University	X	X	X	X	X	X		
St. Patrick's College	32	X	X	X	37	77		
Dalhousie University	X	X	X	x	X	X		
King's College, University of Guelph, University of	x	X X	X X	X	X X	X		
Ontario Veterinary College	x	x	x	42	46	41		
Lakehead University	43	45	45	x	x	x		
Laurentian University of Sudbury			x	x	X	x		
Laval, Université	x	x	x	x	x	x		
Ecole des sciences domestiques	45	x	X	X	45	43		
Faculté de commerce		X	X	x	X			
Lethbridge, University of		25	25	25	X	x		
Manitoba, The University of	х	x	x	x	X	x		
Manitoba Law School, The	45	2.	22	45	X	**		
St. John's College				x	x	x		
St. Paul's College				x	x	x		
McGill University	x	x	x	X	x	x		
McMaster University	x	x	x	X	×	X		
Memorial University of Newfoundland	x	×	x	x	x	x		
Moncton, Université de	x	x	X	X	x	x		
Montréal, Université de	X	x	x	X	x	x		
Hautes études commerciales, Ecole des	x	x				x		
Jean-de-Brébeuf, Collège	X	x	x	x	x			
Loyola College	x	×	-	x	x	×		
Marianopolis College		• •		x	x	x		
Optométrie, Ecole d'				x	x			
Polytechnique, Ecole	x	x	X	X	x	x		
Sainte-Marie, Collège	x	X	x	×	x	X		
Mount Allison University	x	x	x	x	x	x		
Mount Saint Vincent University	x	x	x	x	x	x		
New Brunswick, University of	×	×	x	x	x	x		
St. Thomas University	x	x	x	x	x	X		
Notre Dame University of Nelson	**	-	-		x	x		
Nova Scotia Technical College	x	x	x	x	x	x		
Ottawa, Université d'	x	X	x	x	x	x		
Prince of Wales College	•					X		
Queen's University at Kingston	x	x	x	X	X	x		
Royal Military College of Canada	x	x	X	X	x	X		
mojur marroury corresponds communication		-						



Table C.1 (cont.)

Institutions Included in DBS Survey (cont.)

AUCC Member Institutions

Name	Years Included							
	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68		
St. Dunstan's University	x	x	×	x	x	x		
St. Francis Xavier University	x	X	X	X	X	X		
Saint Mary's University	•	×		x	x	x		
Saskatchewan, University of	x	x	x	×	×	x		
St. Thomas More College	×	x	×	x	×	x		
Sherbrooke, Université de	x	x	x	x	x	x		
Simon Fraser University						X		
Sir George Williams University				x	x	x		
Toronto, University of	x	x	x	x	x	x		
St. Michael's College, University of	х	x	x	x	x	x		
Trinity College, University of	x	x	x	x	x	x		
Victoria University	x	x	x	x	x	x		
Trent University					x	x		
Victoria, University of			x	x	x	x		
Waterloo, University of			x	x	x	x		
Waterloo Lutheran University			x	X	x	x		
Western Ontario, The University of	X	x	X	x	x	×		
Althouse College of Education						x		
Windsor, University of	X	x	x	x	X	x		
Winnipeg, The University of	X	X	x	X	x	X		
York University			X	X	x	X		
Osgoode Hall Law School	x	X	x	x	x	X		

Notes:

The Table is derived directly from the data tapes. It reveals a few cases where particular institutions on the list were temporarily omitted. Most of these omissions occur when components of major institutions are given separately as is the case, for example, with some schools of Laval University. According to DBS, omission in these cases means simply that the component institution was included with the major university. If this explanation is accepted, there remain a few (and rather minor) instances where temporary omission may have affected the reliability of the overall figures.



Appendix C

Table C.2

Other Institutions of Post-Secondary Education

Included in DBS Survey

Name	Years Included							
	1956/57	1958/59	1960/61	1963/64	1965/66	1967/68		
Bathurst, Collège de	x	x	x	x	x	x		
Camrose Junior College	Α.	Λ	^	Δ.	X	Δ		
Chicoutimi, Grand Séminaire de	x	x	x	x	X	х		
Immaculée-Conception, Collège de 1'	x	x	x	x	45	Δ		
Jésuites, Collège des	x	4.	x	45				
Lévis, Collège de	**	x	x	x	x	х		
Marguerite d'Youville, Institut					×			
McMaster Divinity College		x	x	x	x	X		
Ontario College of Education			x	x	x	X		
Ontario College of Optometry					x			
Ontario Institute for Studies in								
Education						X		
Québec, Séminaire de		x	x	x	x	X		
Red Deer Junior College					x	X		
Rimouski, Grand séminaire de	X	x	x	x	x			
Rouyn, Collège classique de	x	x	x	x	x			
Sainte-Anne, Collège	x	x				X		
St-Jean-Eudes, Externat classique	x	x	x	x	x			
St-Joseph, Séminaire				x	x			
Saint-Laurent, Collège de					x	X		
Saint-Louis, Collège			x					
Saint-Paul, Collège		x	x	x	x			
Stanislas, Collège	x	x	x	x		X		



